

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 069547.0241	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/US2005/003159	International filing date ( <i>day/month/year</i> ) 31 January 2005 (31.01.2005)	Priority date ( <i>day/month/year</i> ) 29 January 2004 (29.01.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant ESPEED, INC		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input checked="" type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 31 July 2006 (31.07.2006)
Facsimile No. +41 22 338 82 70	Authorized officer  <div style="text-align: center; font-weight: bold;">Dorothee Mülhausen</div> e-mail: pt01@wipo.int

# PATENT COOPERATION TREATY

REC'D 27 FEB 2006

WIPO

PCT

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: Samir A. Bhavsar  
Baker Botts LLP  
2001 Ross Avenue, Suite 600  
Dallas, TX 75201  
United States of America

Date of mailing  
(day/month/year)

24 FEB 2006

Applicant's or agent's file reference  
069547.0241

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.  
PCT/US05/03159

International filing date (day/month/year)  
31 January 2005 (31.01.2005)

Priority date (day/month/year)  
29 January 2004 (29.01.2004)

International Patent Classification (IPC) or both national classification and IPC  
IPC(7) : G06F 17/60 and US CL : 705/37

Applicant **ESPEED, INC.**

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/US  
Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450, Alexandria, Virginia 22313-1450  
Facsimile No. 571-273-3201

Date of completion of this opinion  
22 October 2005 (22.10.2005)

Authorized officer:  
Blaine R. Copenheaver  
Telephone No. 571-272-7774

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/03159

Box No. I      Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed  
☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper  
☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed  
☐ filed together with the international application in electronic form  
☐ furnished subsequently to this Authority for the purposes of search

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US05/03159

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1. Statement				
Novelty (N)	Claims	<u>15-17 and 32-34</u>	YES	
	Claims	<u>1-14 and 18-31</u>	NO	
Inventive step (IS)	Claims	<u>16, 17, 33 and 34</u>	YES	
	Claims	<u>1-15 and 18-32</u>	NO	
Industrial applicability (IA)	Claims	<u>1-34</u>	YES	
	Claims	<u>NONE</u>	NO	
2. Citations and explanations:				
<p>Claims 1-14 and 18-31 lack novelty under PCT Article 33(2) as being anticipated by Korhammer et al. (US 6,278,982) (hereinafter Korhammer).</p> <p>As per claims 1 and 18 Korhammer discloses a memory (in the Consolidating Computer System CCS 100 in FIG. 2) operable to store a plurality of bid/offer requests for a trading product (col. 4 line 27-35; each bid/offer request associated with at least one of a trader and a marketcenter (col. 7 lines 6-13; item 707 in figure 9), a bid/offer quantity for the trading product (item 702 in figure 9), and a bid/offer price for the trading product (item 703 in figure 9); a processor (in the Consolidating Computer System CCS 100 in FIG. 2) coupled to the memory and operable to: receive a trading order specifying an offer request for the trading product (col. 7 line 6-13), the trading order further specifying an offer quantity (col. 8 lines 32-34; col 8 lines 62-63; col 10. lines 61-65; item 602 in figure 8; item 702 in figure 9) for the trading product and a target offer price (col. 7 lines 6-7; col. 8 lines 62-63) for the trading product; identify at least one of the plurality of bid requests having a bid/offer price that is greater than or equal to the target offer price (col. 12 lines 8-13); match the offer request of the trading order with the at least one identified bid/offer request if the identified bid/offer request is associated with a trader (col. 12 lines 8-13); and route the trading order to a particular market center if the at least one identified bid/offer request is associated with the particular market center (col. 4 lines 8-11; col. 10 lines 12-31, in particular "the Customer can then select routing information as to where the order should be placed by selection of the route 630"; col. 11 lines 66-67).</p> <p>As per claims 2 and 19 Korhammer discloses in col. 12 lines 8-11 matching the offer/bid request of the trading order with the identified bid/offer request forms a matched trading order that comprises a matched quantity and a matched price.</p> <p>As per claims 3 and 20 Korhammer discloses in col. 11 lines 11-13 the matched quantity comprising the lesser of the bid/offer quantity of the identified bid/offer request and the offer/bid quantity specified by the trading order.</p> <p>As per claims 4 and 21 Korhammer discloses in col. 12 lines 11-13 the matched price is based upon at least one of the bid price of the identified bid/offer request and the offer/bid price specified by the trading order.</p> <p>As per claims 5 and 22 Korhammer discloses in col. 12 lines 11-13 identifying a first bid/offer request having a first bid/offer price that is greater than or equal to the target offer/bid price, and identifying a second bid/offer request having a second bid/offer price that is less than the first bid/offer price and greater than or equal to the target offer/bid price.</p> <p>As per claims 6 and 23 Korhammer discloses in col. 11 line 58 - col. 12 line 11 first bid request is associated with a trader and specifies a bid/offer quantity that is less than the offer quantity specified by the trading order and matching comprises facilitating a trade involving the offer request of the trading order and the first bid/offer request such that any portion of the offer/bid quantity that remains unfilled after matching comprises a remaining quantity balance for the trading product.</p> <p>As per claims 7 and 24 Korhammer discloses in col. 12 lines 1-13 the second bid/offer request is associated with a particular market center; and routing comprises routing the trading order to the particular market center for a market center quantity that is at least a portion of the remaining quantity balance.</p> <p>As per claims 8 and 25 Korhammer discloses in col. 12 lines 1-13 the processor determines the market center quantity based at least in part upon the bid/offer quantity of the second bid request and a quantity multiplier associated with the particular market center.</p> <p>As per claims 9 and 26 Korhammer discloses in col. 11 line 58- col. 12 line 13 the memory stores an offer/bid request for the trading product, the offer/bid request specifying an offer/bid quantity that comprises the remaining quantity balance and further specifying an offer/bid price that comprises the target offer/bid price.</p> <p>As per claims 10 and 27 Korhammer discloses in col. 12 lines 11-13 setting a flag to indicate that the first bid/offer request has been matched; and removing the first bid/offer request from memory to indicate that the first bid/offer request has been matched.</p> <p>Continued in Supplemental Box below.</p>				

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/US05/03159

Box No. VI Certain documents cited

1. Certain published documents (Rules 43*bis*.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
US 2005/0171890	04/08/2005	29/01/2004	29/01/2004

2. Non-written disclosures (Rules 43*bis*.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/03159

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box No. V, 2. Citations and Explanations.

As per claims 11 and 28 Korhammer discloses in col. 11 line 58- col. 12 line 11 the first bid/offer request is associated with a particular market center and specifies a bid/offer quantity that is less than the offer/bid quantity specified by the trading order; and routing comprises routing the trading order to the particular market center for a market center quantity such that the offer quantity is reduced by the market center quantity to form a remaining quantity balance.

As per claims 12 and 29 Korhammer discloses in col. 12 lines 11-13 the second bid/offer request is associated with a trader; and matching comprises facilitating a trade involving the offer/bid request of the trading order and the second bid/offer request for a quantity that is at least a portion of the remaining quantity balance.

As per claims 13 and 30 Korhammer discloses in col. 12 lines 11-13 determining the market center quantity based at least in part upon the bid/offer quantity of the first bid/offer request and a quantity multiplier associated with the particular market center.

As per claims 14 and 31 Korhammer discloses in col. 12 lines 11-13 an offer/bid request specifying an offer/bid quantity that comprises the remaining quantity balance and further specifying an offer/bid price that comprises the target offer/bid price.

Claims 15-17 and 32-34 have novelty under PCT Article 33(2) because no singular reference discloses the combination of the elements of claims 1-14 and 18-32.

Claims 15 and 32 lack an inventive step under PCT Article 33(3) as being obvious over Korhammer in view of Buchalter H2064 (hereinafter Buchalter). Korhammer does not teach that the routed trading order comprises an immediate-or-cancel (IOC) order. Buchalter in col. 12 lines 11-13 teaches the routed trading order comprises an immediate-or-cancel (IOC) order. It would have been obvious to one of ordinary skill in the art to implement an order as an immediate-or-cancel order to avoid using multiple systems (Korhammer col. 6 lines 45-50).

Claims 16 and 33 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest in conjunction with a securities auction system that the bid price of each bid request associated with a market center comprises a bid price that is adjusted according to at least one of cost information and rebate information associated with the market center.

Claim 17 and 34 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest in conjunction with a securities auction system that the bid price of each bid request associated with a market center comprises a bid price that is adjusted according to policy information associated with the market center and best price information for the trading product.

Claim 1-34 have industrial applicability as defined PCT Article 33(4) because the subject matter can be made or used by industry.